



Discovery, development and acquisition

SPP Presentation

AUGUST 2017

# Corporate snapshot

## Capital structure

Issued share capital (MCT)	454.0 mil
Options	78.6 mil
Share price (June 2017)	A4.5c
Market capitalisation (diluted)	A\$23.9 mil
Cash (30 Mar 2016)	~A\$3.5 mil*
Debt (30 Dec 2016)	A\$0 mil
Average daily traded volume	0.90 mil

## Major shareholders

Founders	~15%
Management and Associates	~12%
Shanghai Metals	9.4%

\*includes \$1.8m cash + \$1.7m options in the money (excludes recent \$1.5m equity placement)

## Metalicity share price



## Analyst coverage



PATERSONS



INDEPENDENT  
INVESTMENT RESEARCH

Beer & Co.

# Management Capability

## Board and Management

### **CHAIRMAN** **Andrew Daley**

- Mining Engineer and Investment Banker
- 40 years experience in the resource and investment banking industry
- Founding Director of PanAust, Oxiana and Investor Resources Limited (“IRL”)

### **MANAGING DIRECTOR** **Matthew Gauci**

- MBA and Mining Executive
- 20 years experience in the resource industry
- Founding Director of Metalicity

### **NON-EXECUTIVE DIRECTOR** **Mathew Longworth**

- Geologist and Mining Executive
- 30 years experience in the resources industry
- Formerly Managing Director of Heron Resources

### **NON-EXECUTIVE DIRECTOR** **Chris Bain**

- Geologist and Fund Manager
- 40 years experience in the resource industry
- Formerly Geologist with MIM Holdings and Founding Director of IRL

### **COMPANY SECRETARY** **Neil Hackett**

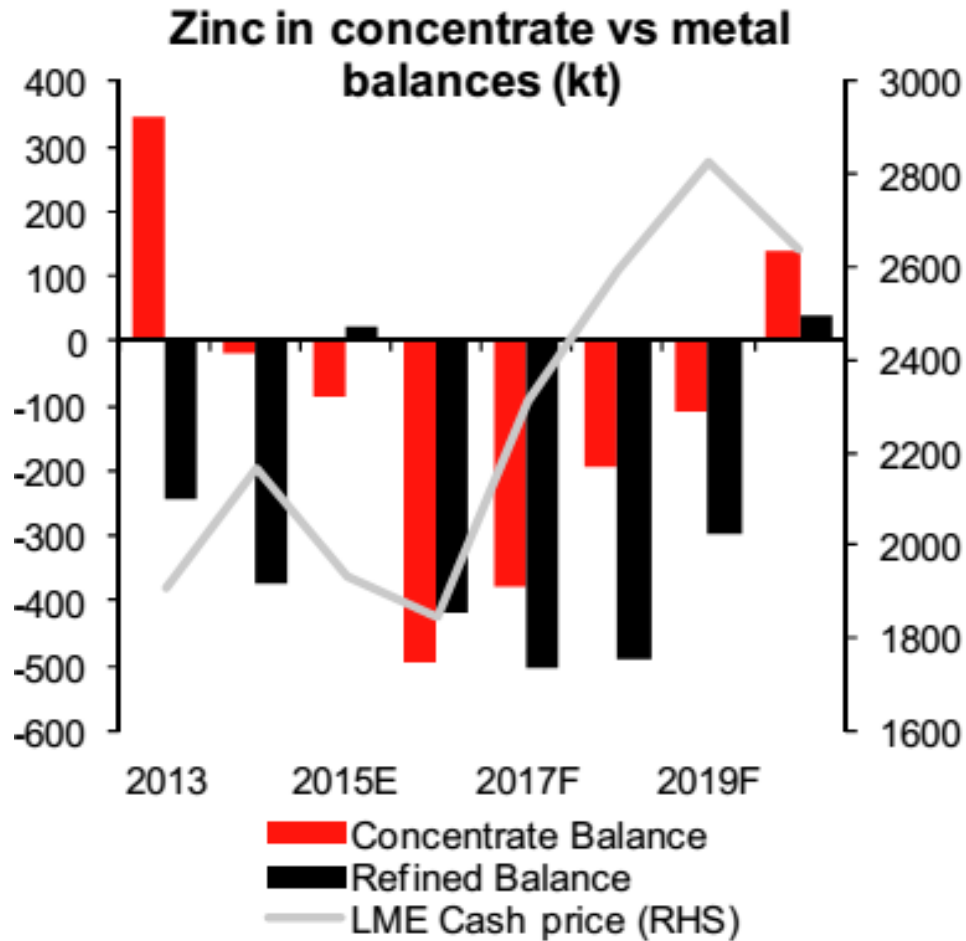
- Company Secretary and Director
- 25 years experience in the resources industry
- Formerly company secretary and director with various small-mid caps

### **CHIEF FINANCIAL OFFICER** **Justin Barton**

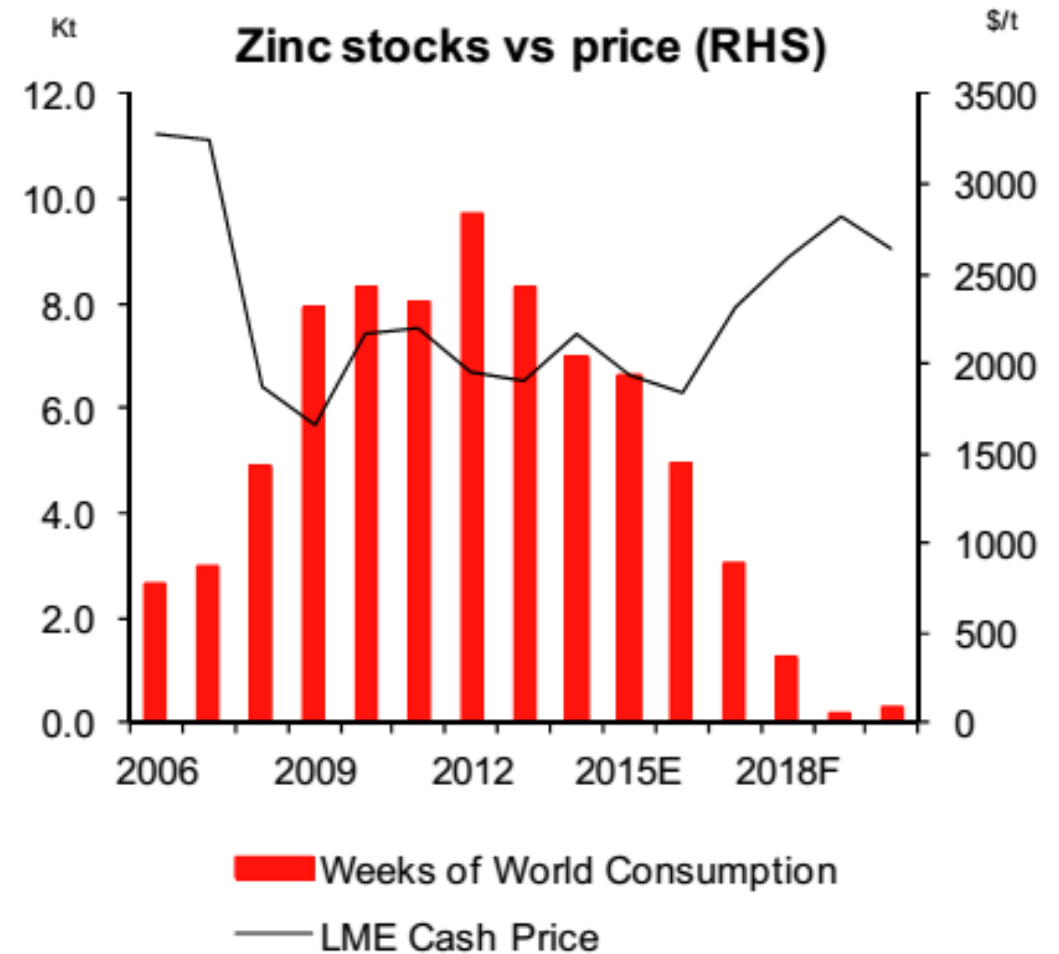
- CFO and Company Director
- 20 years experience in the resources sector
- Formerly with Ernst & Young and Rio Tinto



# Zinc: supply shortage driving prices

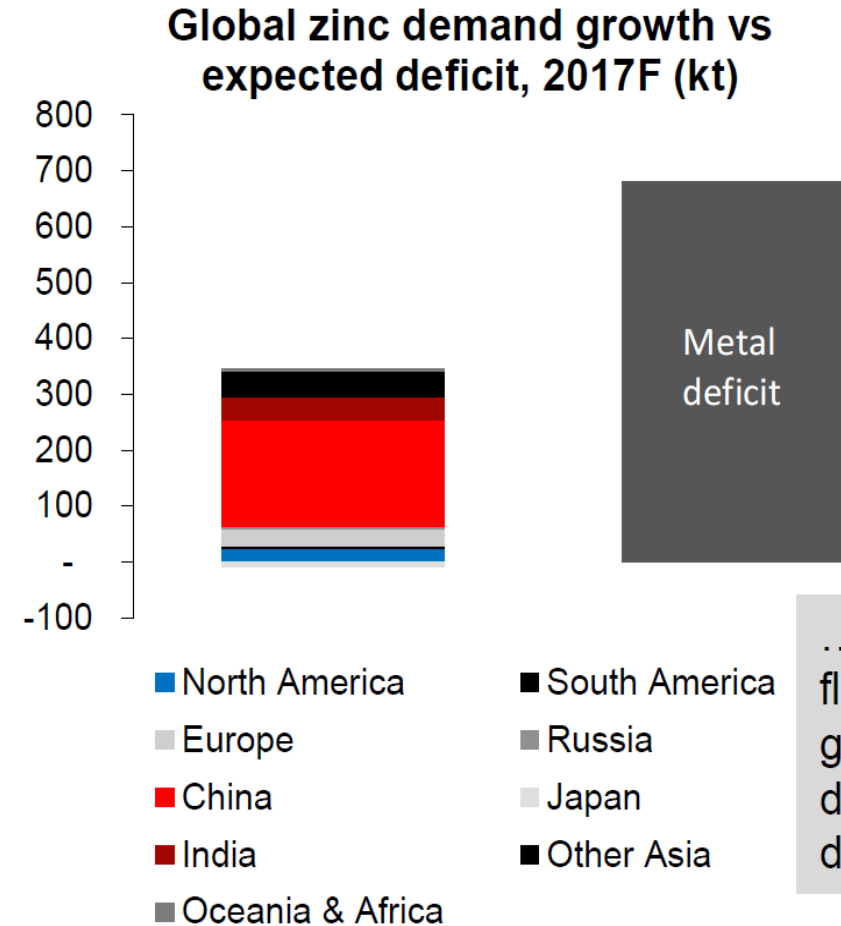
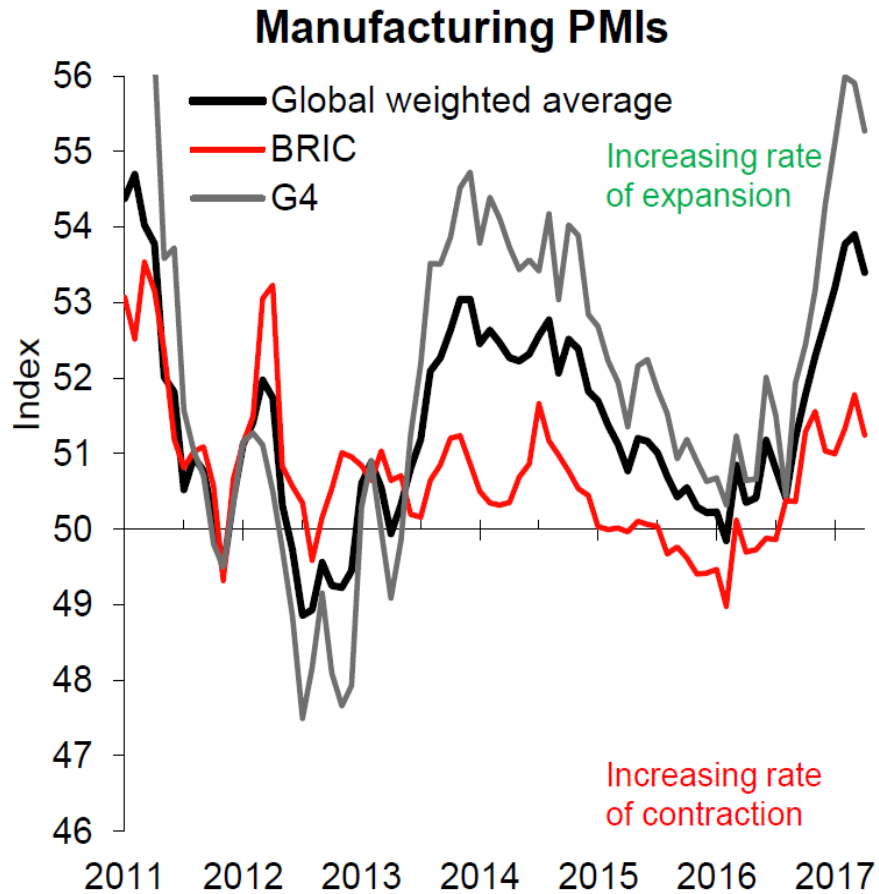


Source: Macquarie Research, March 2016 (Wood Mac, CRU, LME, ILZSG)



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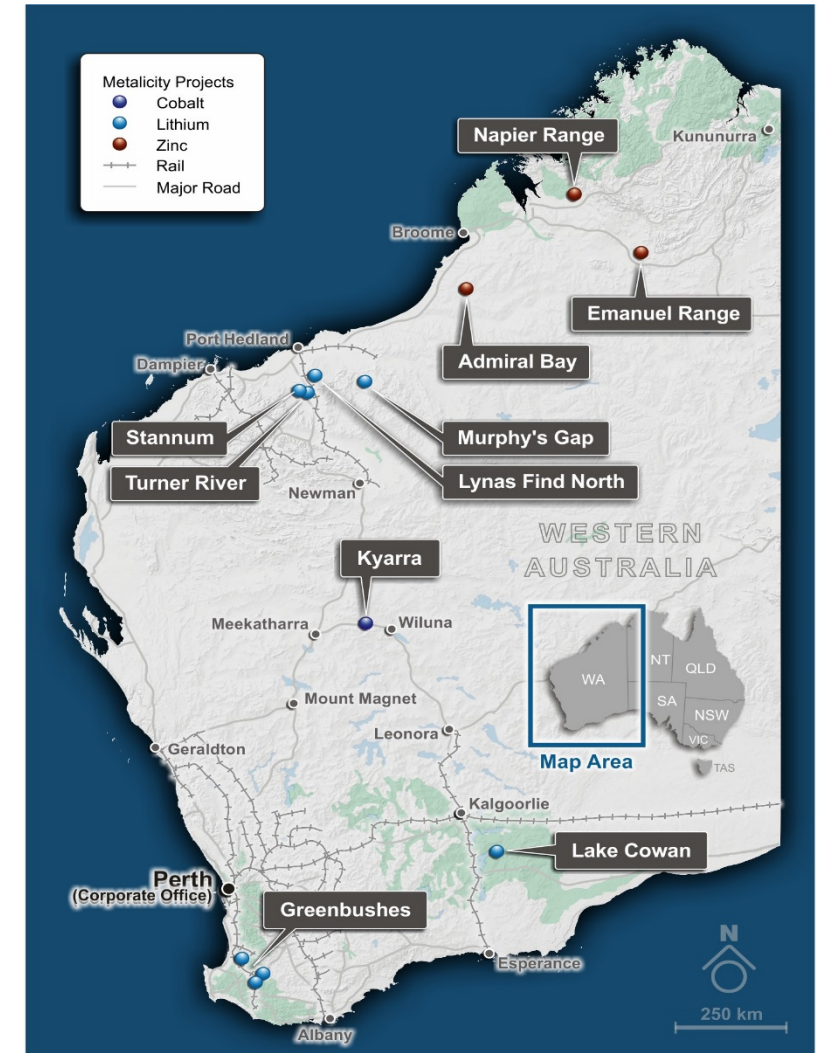
# Zinc: macros drivers in good shape



... and even flat global growth would deliver a deficit.

# We are driven by return on capital

- ▶ Discovery, development and acquisition are our enablers.
- ▶ All assets are in the premier mining jurisdiction of Western Australia.
- ▶ Primary development assets are the world-class Admiral Bay Zinc Project, and the recent Option to acquire the Lennard Shelf Zinc Project (Napier Range and Emanuel Range).
- ▶ Secondary asset(s) are highly prospective, drill ready cobalt tenure at Kyarra.
- ▶ All project acquisitions undertaken at low cost to shareholders.
- ▶ Capital raising will support a range of potentially high impact work programs in the second half of 2017 and 2018.
- ▶ Experienced Board and Management team significant shareholding.



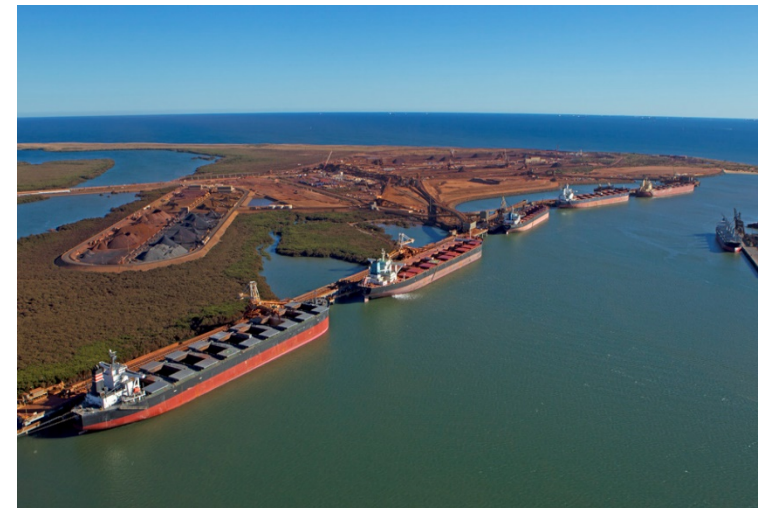


# Admiral Bay zinc project highlights

- ▶ 100% Metalicity ownership including currently 100% offtake<sup>1</sup>.
- ▶ Located in the Canning Basin of Western Australia, approximately 140km south of Broome.
- ▶ Close proximity to excellent power, water, road and port infrastructure solutions.
- ▶ Updated Inferred Mineral Resource Estimate (MRE) of **170 Mt at 7.5% Zn<sub>Eq</sub>**<sup>2</sup>
  - In-situ contained metal of 7.0Mt zinc, 4.6Mt lead and 137Moz silver
  - Delineated on granted MLs and EL
- ▶ High grade zone of **20Mt at 10% ZnEq (including 4.9Mt at 12.5% ZnEq)**.
- ▶ Targeting a multi-decade operation of world class zinc-lead scale and operating cost.
- ▶ Scoping Study completed by SRK Consulting (July 2016) with the following key outcomes:
  - **Project development determined to be technically feasible**
  - Base case open stoping mining method
  - Flat lying deposit geometry and rock properties potentially favourable for longwall mining
  - Conventional flotation processing with expected high metallurgical recoveries

<sup>1</sup> Subject to MOU signed with China Minmetals Nonferrous Metals Co. Ltd for 10% of Admiral Bay zinc and lead concentrate. See Metalicity ASX release on 17/07/2017 .

<sup>2</sup> See Metalicity ASX release on 4/07/2016; Zn<sub>Eq</sub> = Zn + 0.97 Pb + 0.03 Ag (Table 1: Zinc Equivalence Parameters).



# A globally significant zinc resource

## Admiral Bay Resource Estimate

Classification	Tonnes (Mt)	Zn (%)	Pb (%)	Ag (g/t)	Zn <sub>eq</sub> (%) <sup>1</sup>
Inferred	170.0	4.1	2.7	25	7.5

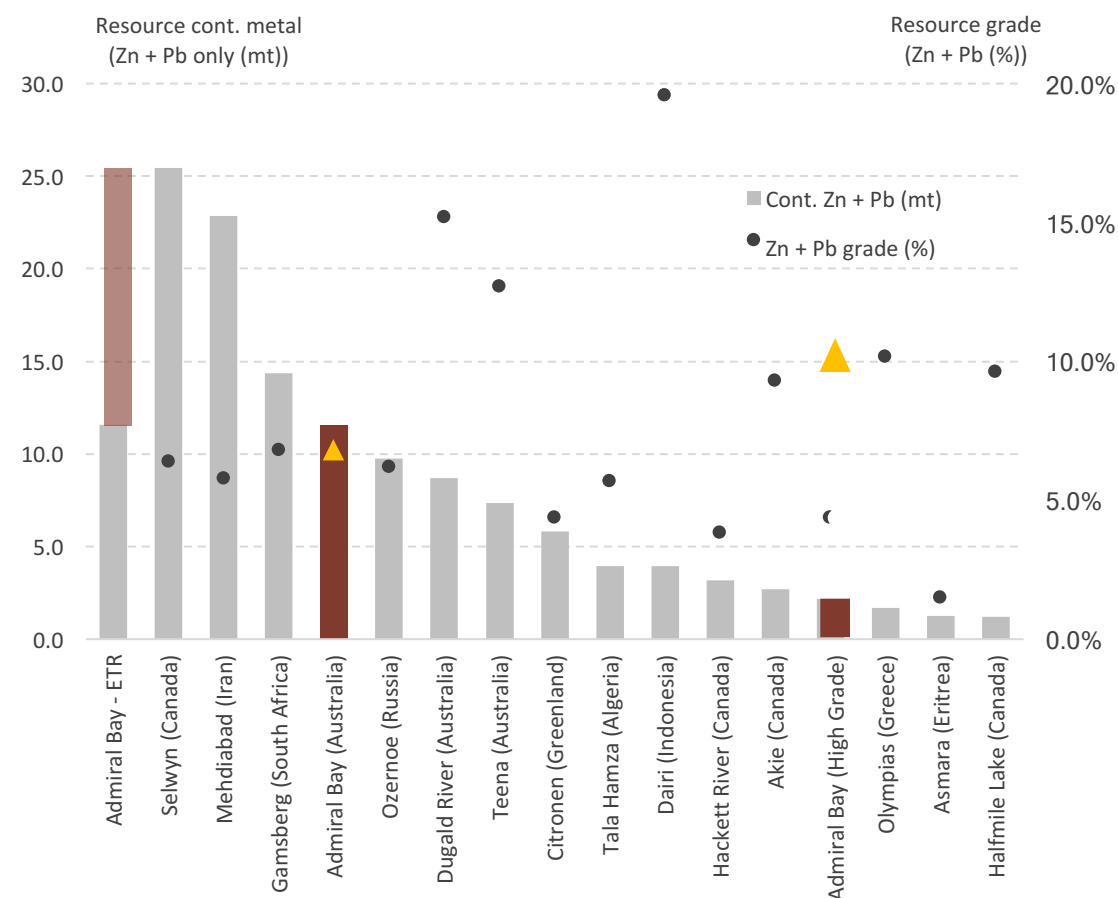
- ▶ Contained metal = 7Mt zinc, 4.6Mt lead, 137Moz silver
- ▶ 3.0% ZnEq cut-off grade
- ▶ **Exploration Target Range<sup>2</sup>**
  - Exploration target estimate based on 3% Zn+Pb cut-off grade
  - 160-210Mt at 4.5-4.6% Zn, 2.2-2.1% Pb and 25g/t Ag
  - Contained metal = 7.2-9.6Mt Zn, 3.5-4.3Mt Pb, 128-169Moz Ag
  - 18km targeted strike extent
- ▶ High Grade zone of 10Mt at 10% ZnEq<sup>3</sup>

<sup>1</sup> See Metalicity ASX release on 4/07/2016;  $Zn_{eq} = Zn + 0.97 Pb + 0.03 Ag$  (Table 1: Zinc Equivalence Parameters)

<sup>2</sup> Note that the potential quantities and grades are conceptual in nature, that there has been insufficient exploration to estimate Mineral Resources and that it is uncertain whether further exploration will result in the estimation of Mineral Resources.

<sup>3</sup> See Metalicity ASX release on 10/2/2015

## Major zinc development projects globally

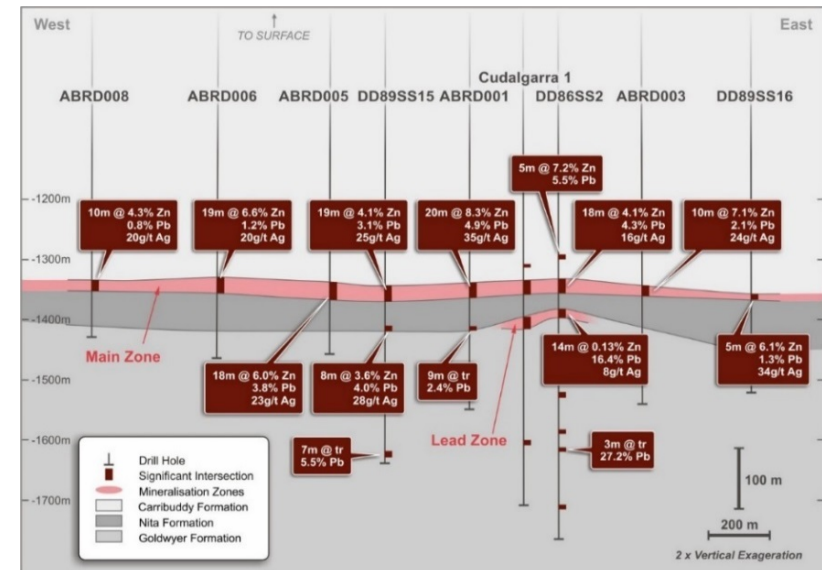
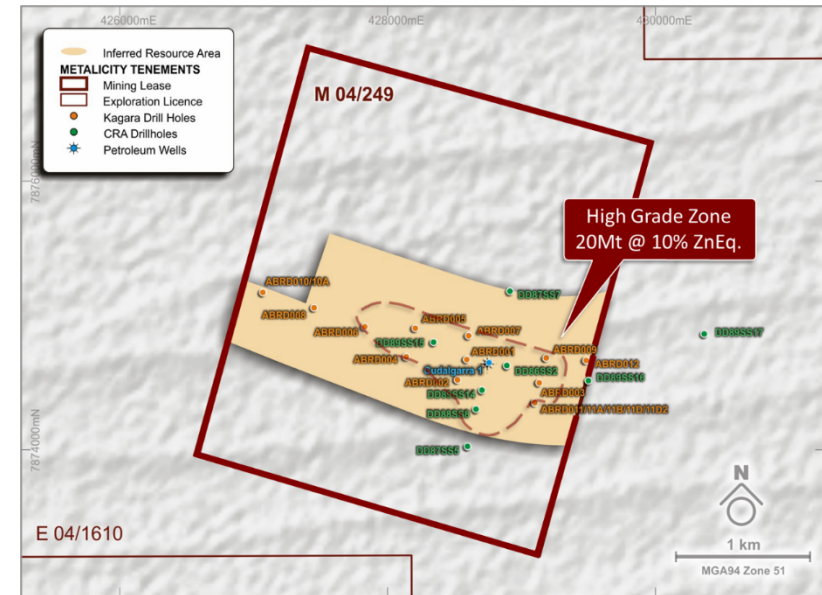


Source: Various company reports and releases



# A well defined high grade zinc-lead zone

- ▶ Higher-grade zone of 20Mt at 10% ZnEq, including 4.9Mt at 12.5% ZnEq.
- ▶ Higher-grade zone within existing Inferred Resource of 170Mt at 7.5% ZnEq.
- ▶ Best intersections include 20m at 14.5% ZnEq (including 6m at 24.3% ZnEq) and; 14m at 17.7% ZnEq (including 14m at 16.4% Pb).
- ▶ Three Zn-rich intersections >10% ZnEq all lie within this zone.
- ▶ Multiple Zn-rich zones >10% ZnEq defined as targets for future work.
- ▶ Drilling is planned and budgeted to convert 12Mt of high grade zone to indicated category.
- ▶ High grade indicated resource expected to represent payback on total pre-production capital.
- ▶ DSO product potential from a total of 3Mt of resource.

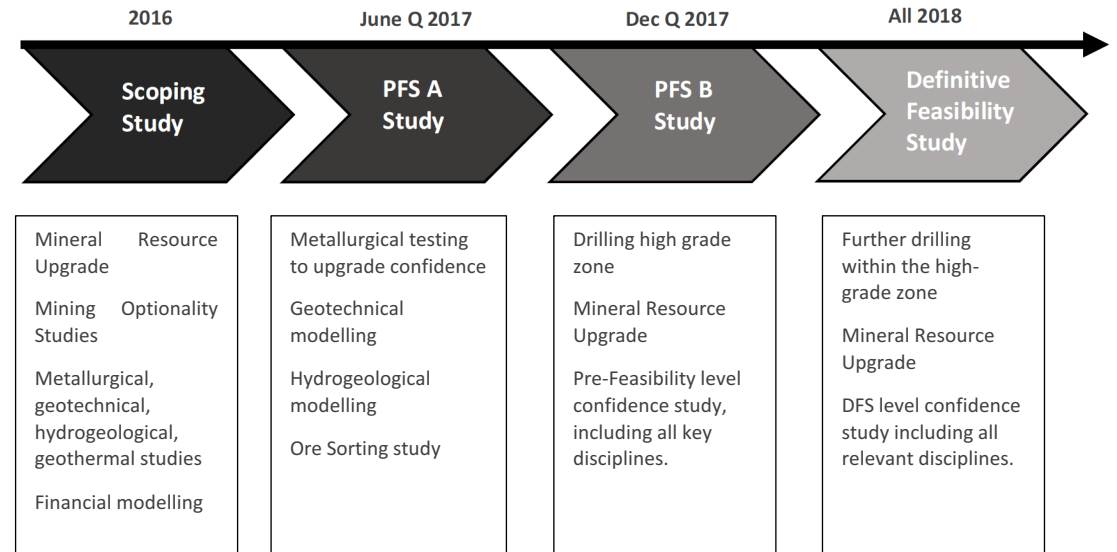


Source: Metalicity

# Pre-feasibility study underway

- ▶ Admiral Bay PFS to be completed in a two-staged approach.
- ▶ Pre-feasibility Study Stage 1 (to be completed with SRK Consulting) aims to:
  - Address geotechnical and hydrogeological criteria to inform mining method
  - Complete Ore Sorting test work aimed to test ore suitability for upgrading ore to a grade of  $\approx 40\%$  ZnEq for a potential DSO product.
  - Complete key metallurgical test work programs and process flow sheet design
  - Design two staged approach to mining with “starter mine” DSO operation
  - Convert MOU with China Nonferrous and China Minmetals to binding Joint Venture Agreement
- ▶ PFS Stage 2 will involve directional drilling to upgrade Mineral Resource to Indicated status and complete PFS level confidence studies across all disciplines.
- ▶ Two stage mining strategy being evaluated incorporating stage 1 low capital, 4 year DSO starter mine, that would provide funding to ramp up to stage 2 full scale concentrate model for 21 years+.

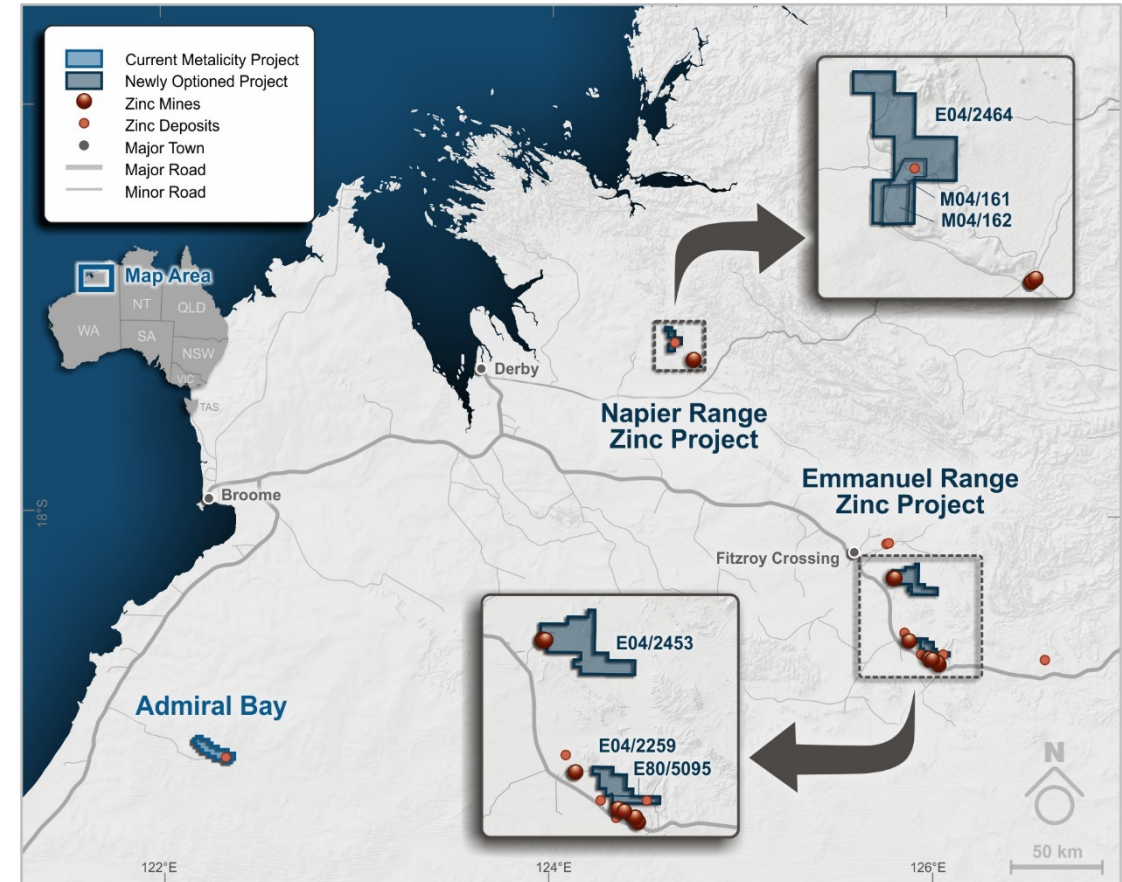
**Table 1. PRE-FEASIBILITY STUDY STRATEGY**



Source: Metalicity

# Lennard Shelf zinc project highlights

- ▶ Option to acquire 100% of the Lennard shelf zinc project which includes the high grade near surface Napier Range Zinc Project and Emmanuel Range Zinc Project.
- ▶ Napier Range:
  - JORC 2012 Inferred Mineral Resource Estimate (MRE) of 750kt at 13.6% ZnEq (5.8% Zn, 7.2% Pb and 54g/t Ag).
  - ETR of 1-4Mt at 10-15% ZnEq<sup>1</sup> across a number of separate prospects
  - High grade, near surface and potentially low capital project
- ▶ Emmanuel Range:
  - In close proximity to the Pillar, Kapok, Cadjebut zinc deposits
  - Strike of ~30km of untested prospective zone with major faults

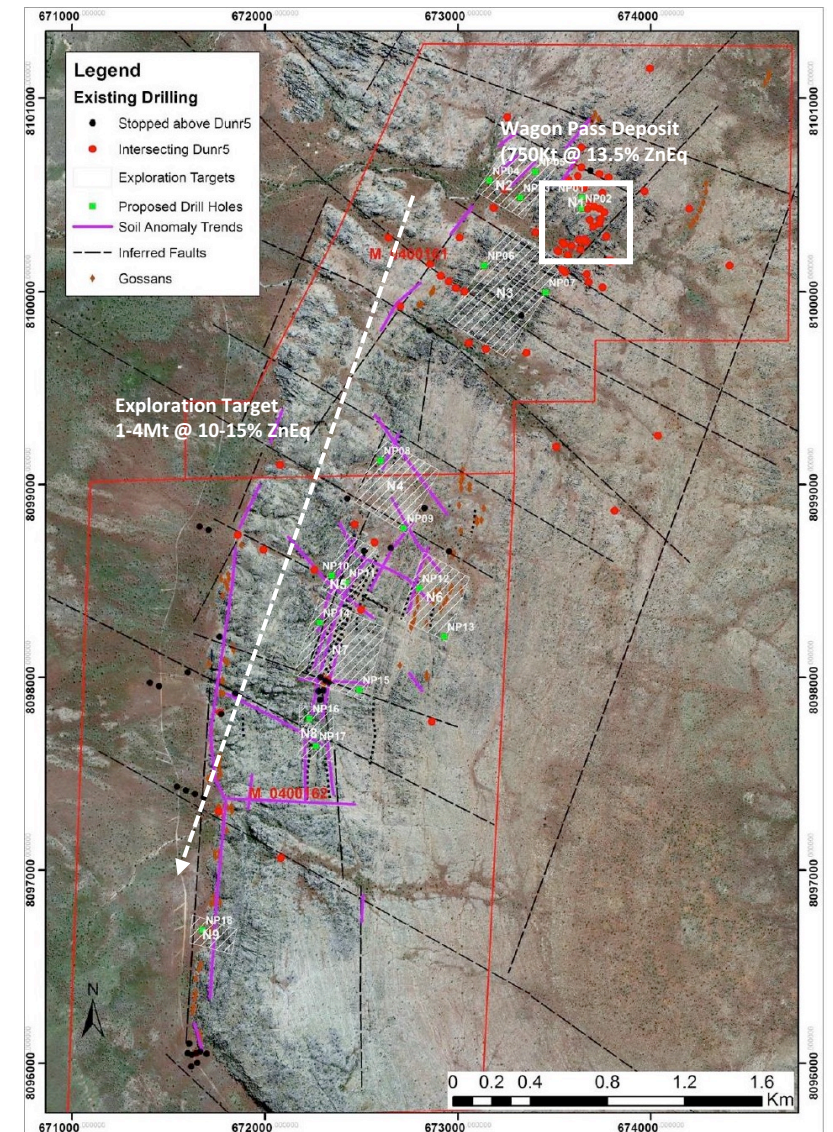
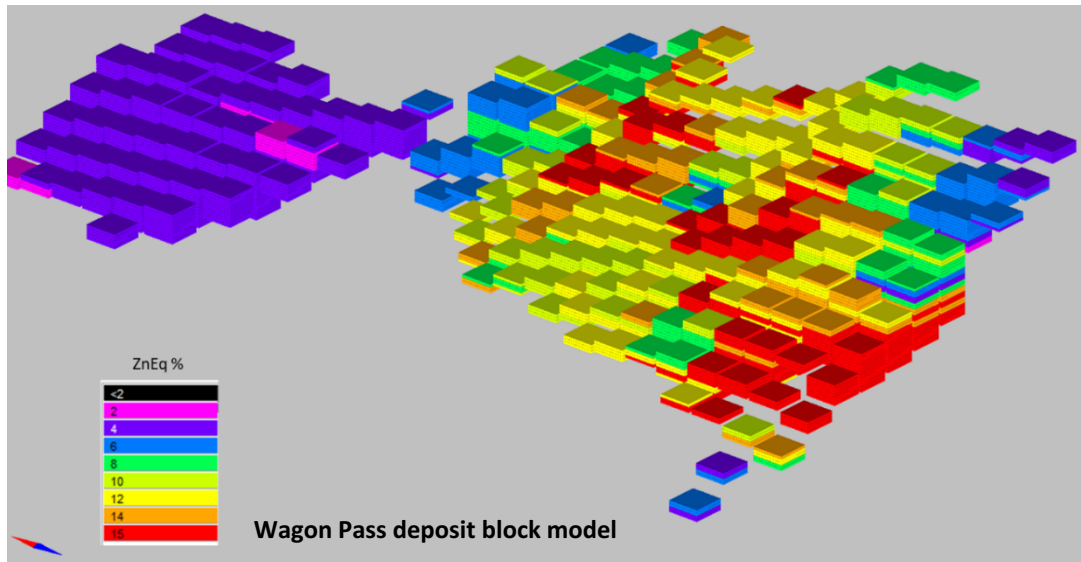


<sup>1</sup> Note that the potential quantities and grades are conceptual in nature, that there has been insufficient exploration to estimate Mineral Resources and that it is uncertain whether further exploration will result in the estimation of Mineral Resources.

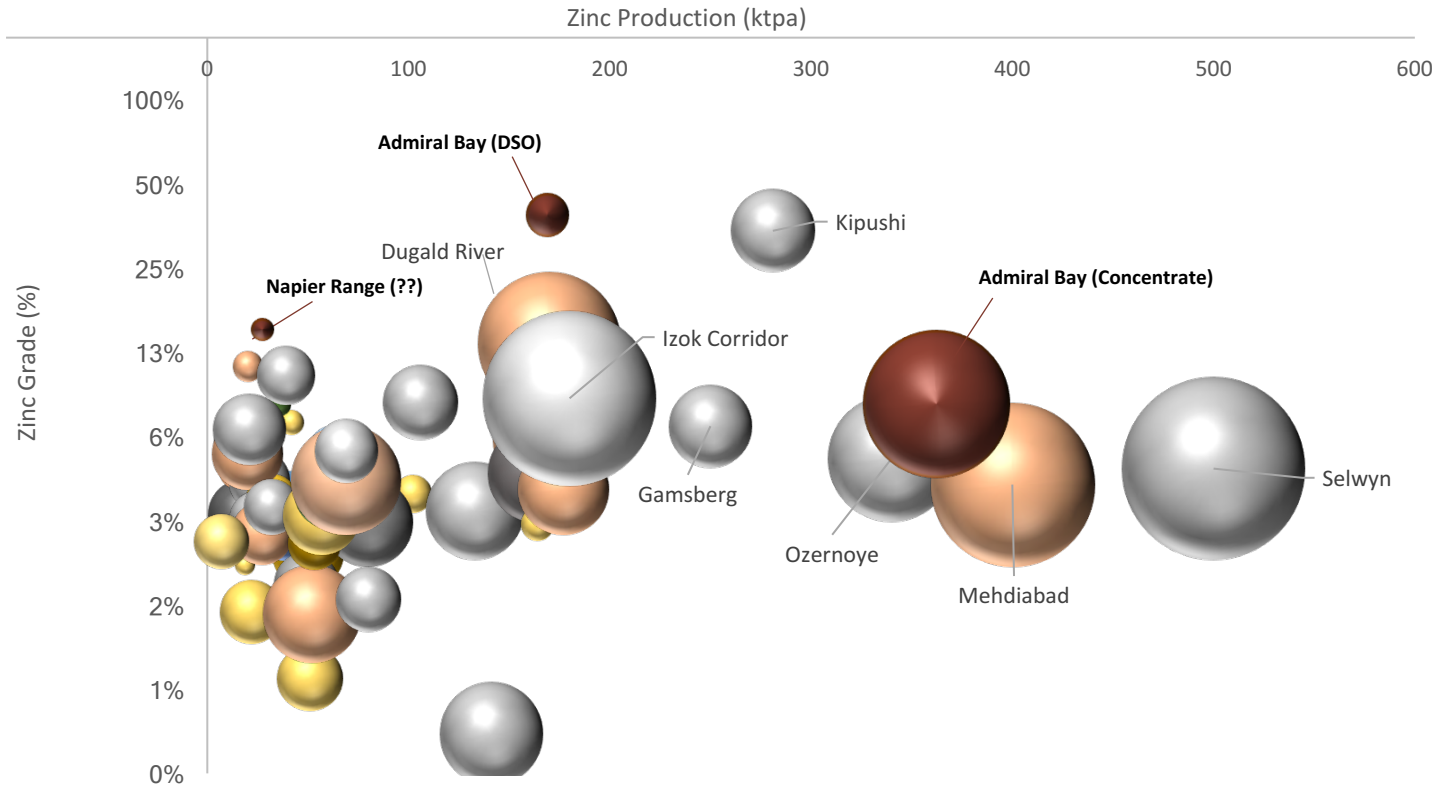


# Lennard Shelf zinc project highlights

- ▶ High grade near surface and potentially low capital zinc project.
- ▶ Preliminary review suggest that Wagon Pass is a stand alone economically feasible project.
- ▶ Significant high grade exploration upside with ETR
- ▶ Further exploration upside with surface samples of 20%+ Zn outcropping
- ▶ Multiple synergistic opportunities with Admiral Bay, including infrastructure, mineral processing equipment, human resources, financing and offtake.
- ▶ Possible starter mine to part finance development of Admiral Bay



# Global zinc project development



Note: Bubble size equals capital (US\$m); Y-Axis is a logarithmic scale to account for Kipushi's high grade  
Source: Public Company Reports

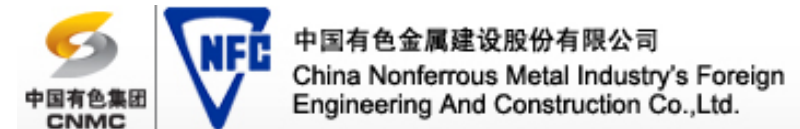
Project	Area / Country Risk Score	Location Risk Rank (from 109)
<b>Admiral Bay</b> <i>Australia (WA)</i>	<b>87</b>	<b>1</b>
Selwyn <i>Canada</i>	79	12
Dugald River <i>Australia (Qld)</i>	78	16
Izok Corridor <i>Canada</i>	74	23
Ozeroye <i>Russian Federation</i>	66	47
Kipushi <i>DRC</i>	59	60
Gamsberg <i>South Africa</i>	58	66
Mehdiabad <i>Iran</i>	Sanctioned by EU, UN and USA	

Source: Mining Survey 2015 – Fraser Institute



# Sector leading zinc partners

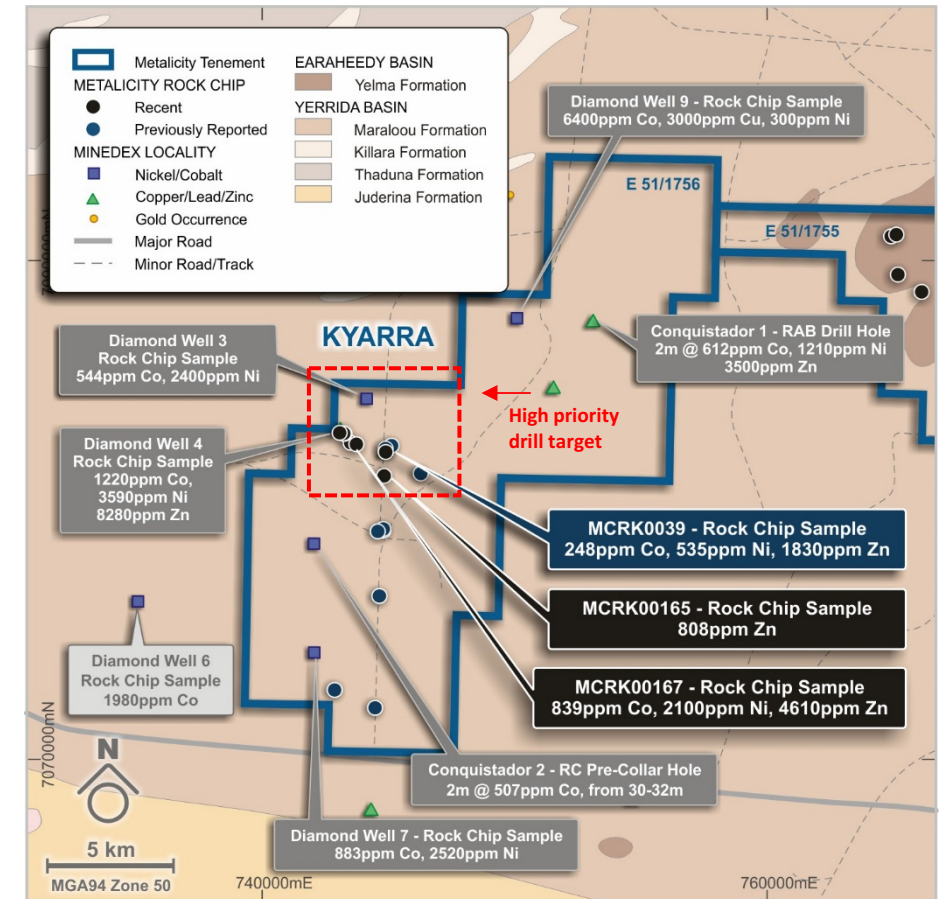
- ▶ **China Minmetals**<sup>1</sup> is one of China's, and the world's, leading zinc smelting companies with annual consumption capacity of 1Mtpa zinc concentrate.
- ▶ MOU signed with subsidiary **China Minmetals Nonferrous Metals Co. Ltd** ("CMN") for portion of future zinc and lead off-take from Admiral Bay.
- ▶ The MOU contemplates the supply of an initial 10% of future offtake from an anticipated production of 174Kt zinc and 115Kt lead per annum from Admiral Bay in exchange for metallurgical and beneficiation testwork which establishes a pathway for investing in Metalicity and/or Admiral Bay.
- ▶ CMN will undertake metallurgical and beneficiation testwork on approximately 50kg of existing core currently held by the company in a refrigerated container. CMN will prepare a report for Metalicity as part of the current PFS for the DSO and Concentrate Model, as well as for future financing and off-take.
- ▶ **China Nonferrous Metal Industry's Foreign Engineering and Construction Co. Ltd** ("NFC") is a global leader in zinc project engineering, procurement, construction and development.
- ▶ MOU signed with subsidiary CNFC Equipment Co. LTD ("CNFC") for the development, construction and financing of Admiral Bay.



1. Minmetals is one of China's leading zinc smelting company's with annual consumption capacity of 1Mtpa zinc concentrate and is currently completing a merger with China Metallurgical Corporation (MCC). The combined revenues of Minmetals and MCC are reported to amount to approximately twice that of the world's largest publicly traded mining company, BHP.<sup>1</sup> China is the world's largest consumer and processor of zinc concentrates into refined zinc. More information can be found at: [http://china.org.cn/business/2016-06/03/content\\_38595154.htm](http://china.org.cn/business/2016-06/03/content_38595154.htm)

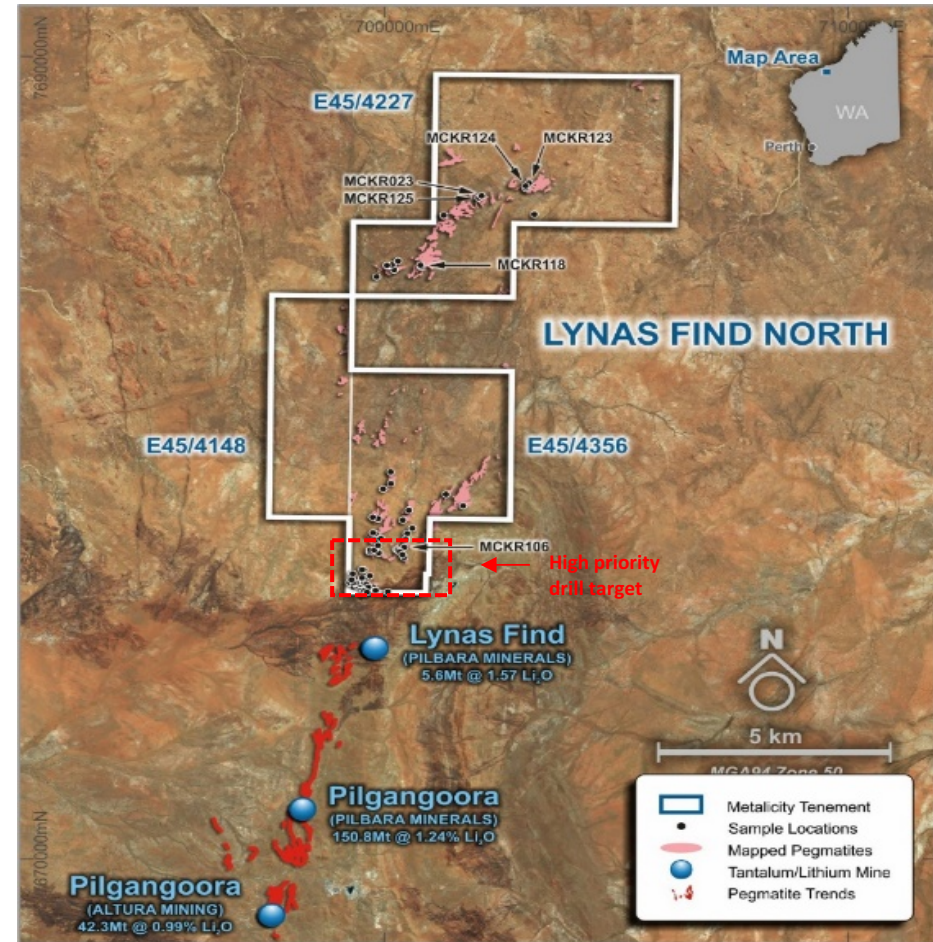
# Cobalt drilling current quarter

- ▶ The Kyarra Cobalt Project located in the emerging Yerrida Basin, WA.
- ▶ Extensive cobalt anomalies identified over a 25km strike.
- ▶ A 4km<sup>2</sup> priority target area has been identified where significant surface samples up to 6,400ppm cobalt and drill intersections including 2m at 612ppm cobalt have been achieved.
- ▶ Large landholding of 645km<sup>2</sup> of tenements covering a significant portion of the Yerrida Basin.
- ▶ Mineralisation model analogous to the Zambian Copper Belt – prospective for copper-cobalt and nickel-cobalt deposits.
- ▶ Maiden 2,000 – 3,000m drilling program planned for September Quarter.



# Lithium drilling current quarter

- ▶ Lynas Find North adjoins Pilbara Minerals' and Altura Mining's Pilgangoora projects to the south.
- ▶ Extensive lithium bearing pegmatites have been mapped over a strike extent of approximately 10km at Lynas Find North.
- ▶ Pegmatites mapped within 1km of Lynas Find deposit.
- ▶ Drilling planned across a 10km x 2km target area.
- ▶ Excellent nearby processing infrastructure and access.
- ▶ Subject to results, program potentially to be extended to the Stannum lithium discovery to the southwest.





# Investment highlights

- ▶ Zinc strategy rapidly building genuine leverage in tightening zinc market.
- ▶ Option to acquire the high grade, near surface and potentially low capital Lennard Shelf project provides near-term development project as work continues on Admiral Bay.
- ▶ Secondary cobalt and lithium work programs gathering momentum with potential to add significant near-term value.
- ▶ Multiple short-term catalysts for second half of 2017:
  - Admiral Bay Joint Venture discussions continuing throughout Asia
  - Lennard Shelf due diligence program and potential acquisition
  - Cobalt drilling at Kyarra in September Quarter 2017
  - Lithium drilling at Pilgangoora North in September Quarter 2017

